This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Computer software for automatically generating a graphical user interface for a relational database, said software embodied in a computer readable medium having a set of computer instructions encoded thereon and comprising:

>> utility software extracting schema information from the relational database and automatically generating corresponding schema and graphical user interface metadata stored in a repository; and

>> a repository for said metadata; and

>> user interface software automatically developing from the metadata a user interface appropriate to the relational database.

2. (original) The computer software of claim 1 wherein said schema and user interface metadata comprise entities, entity fields, entity relationships, and entity search paths.

3. (original) The computer software of claim 2 wherein said schema and user interface metadata comprise entity relationships comprising one-to-many, many-to-one, and many-to-many relationships.

4. (original) The computer software of claim 3 wherein said automatically developed user interface comprises context menus specific to type of entity relationship.

5. (original) The computer software of claim 2 wherein said schema and user interface metadata additionally comprises platform attributes for abstracting syntactic differences between database implementations.

6. (original) The computer software of claim 1 additionally comprising software permitting addition of non-automatically-generated functionality to said developed user interface selected from the group consisting of scripts, external components, business rules, and triggers.

7. (original) The computer software of claim 1 wherein said utility software refreshes said metadata after schema changes are made to the relational database.

8. (currently amended) Computer apparatus for automatically generating a graphical user interface for a relational database, said apparatus comprising:

                    means embodied in a computer readable medium having a set of computer instructions encoded thereon for extracting schema information from the relational database and automatically generating corresponding schema and graphical user interface metadata;

                    repository means for containing said metadata; and

                    means embodied in a computer readable medium having a set of computer instructions encoded thereon for automatically developing from the metadata a user interface appropriate to the relational database.

9. (original) The computer apparatus of claim 8 wherein said schema and user interface metadata comprise entities, entity fields, entity relationships, and entity search paths.

10. (original) The computer apparatus of claim 9 wherein said schema and user interface metadata comprise entity relationships comprising one-to-many, many-to-one, and many-to-many relationships.

11. (original) The computer apparatus of claim 10 wherein said automatically developed user interface comprises context menus specific to type of entity relationship.

12. (original) The computer apparatus of claim 9 wherein said schema and user interface metadata additionally comprises platform attributes for abstracting syntactic differences between database implementations.

13. (original) The computer apparatus of claim 8 additionally comprising software permitting addition of non-automatically-generated functionality to said developed user interface selected from the group consisting of scripts, external components, business rules, and triggers.

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14. (original) The computer apparatus of claim 8 wherein said extracting means refreshes the metadata after schema changes are made to the relational database.

15. (currently amended) A method of automatically generating a graphical user interface for a relational database, the method comprising the steps of:

extracting schema information from the relational database and automatically generating corresponding schema and graphical user interface metadata;

storing the metadata in a repository; and

automatically developing from the metadata a user interface appropriate to the relational database.

16. (original) The method of claim 15 wherein the schema and user interface metadata comprise entities, entity fields, entity relationships, and entity search paths.

17. (original) The method of claim 16 wherein the schema and user interface metadata comprise entity relationships comprising one-to-many, many-to-one, and many-to-many relationships.

18. (original) The method of claim 17 wherein the automatically developed user interface comprises context menus specific to type of entity relationship.

19. (original) The method of claim 16 wherein the schema and user interface metadata additionally comprises platform attributes for abstracting syntactic differences between database implementations.

20. (original) The method of claim 15 additionally comprising the step of adding non-automatically-generated functionality to the developed user interface selected from the group consisting of scripts, external components, business rules, and triggers.

21. (original) The method of claim 15 additionally comprising the step of refreshing the metadata after schema changes are made to the relational database.